

### **III. REMARKS**

In the Office Action, claims 88-89 were rejected under 35 U.S.C. 101 because the claims are directed to a computer program as set forth in the Action. Claims 1, 6-11, 14, 17-21, 26-29, 31-64 and 69-87 were rejected under 35 U.S.C. 101 because the claims do not provide for a post solution as set forth in the Action.

Claims 88-89 were rejected under 35 U.S.C. 112, first paragraph, for lack of conformance between the description in the specification and the claimed subject matter, and Claims 70-72, 74 and 85-87 were rejected under 35 U.S.C. 112, first paragraph, as being in the form of a single means claims, as set forth in the Action. Claims 29-36 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for reasons set forth in the Action.

Claims 1, 6-9, 11, 14, 27-29, 31, 36-40, 42-43, 49-, 51-52, 55, 69-70, 72, 74 and 85-88 were rejected under 35 U.S.C. 102 as being anticipated by Johansson (US 6473399) for reason set forth in the Action.

Claims 23, 25 and 65-67 were said to contain allowable subject matter.

Various ones of the claims are amended, and the following argument is presented to distinguish the claimed subject matter from the teachings of the cited art, thereby to overcome the rejections and to show the presence of allowable subject matter in the claims.

To overcome the rejection of claims 88-89 under 35 U.S.C. 101, independent claim 88 is amended to recite "a computer readable medium comprising a software program", and claim 89 is cancelled without prejudice as a result of other amendments to the claims.

With respect to overcoming the rejections of claims 1, 6 - 11, 14, 17 - 21, 26 - 29, 31 - 64 and 69 - 87 under 35 U.S.C. 101 as being directed towards non-statutory subject matter because they do not provide a "post solution", the Applicant has amended all the independent claims to define more clearly that the claimed invention is directed towards a method and associated apparatus for the determination of a bit rate value, the bit rate value being representative of a bit rate of information transferred in a logical channel of a protocol layer. Accordingly, references to provision of an indication of the determined bit rate to an application program or another protocol layer have been removed from the independent claims. Claim 1, as amended, states a purpose of the invention, namely, maintaining and updating an indication of the determined bit rate value in a memory available for use by the first communication device. Thus, claim 1 and its dependent claims provide post solution activity, so as to overcome this ground of rejection. Corresponding amendments are made in other ones of the independent claims so to overcome this ground of rejection in the independent claims and their respective dependent claims.

In point 6 of the Official Action, claims 88 and 89 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. According to the Examiner, the specification does not disclose that the steps claimed in claims 88 & 89 are performed by program code. The Applicant respectfully disagrees with this point of view and directs the Examiner's attention to paragraph 0091 of the patent application publication for the present case, US 2002/0114306. This states that the "invention is implemented in a communication device mainly by means of software" (paragraph 0091, lines 1 & 2). Lines 4 to 10 of the same paragraph state that the "mobile station 60 comprises processing means CPU, a radio part RF and a user interface UI.... The processing means CPU comprise a microprocessor (not shown in Fig.6), a memory MEM and software SW." Furthermore, lines 22 to 25 of paragraph 0091 disclose that: "bit rate determination and maintenance of the database according to the invention are performed by the microprocessor using the software and the memory". Combined with the disclosure of the specification as a whole and, in particular, the details of the bit

rate value calculation provided e.g. in paragraph 0069, it is the Applicant's view that the application text provides ample teaching that would enable a skilled person to implement the present invention as a computer program as claimed in claim 88.

Point 6 of the Official Action also rejects claims 70, 71, 72, 74 and 85 - 87 under 35 U.S.C. 112, first paragraph, as single means claims. In response, the Applicant has amended the claims. In particular, the subject matter of claim 73, relating to the database block, has now been introduced into claim 70. It is the Applicant's view that this should be sufficient to overcome the Examiner's objection to independent claim 70 and all claims that depend from claim 70. Claim 85 has been similarly amended to include a definition of the database block, thereby overcoming the corresponding rejection of claims 85 - 87 under 35 U.S.C. 112.

Various ones of the claims are cancelled without prejudice because of the inclusion of their respective subject matter in their respective base claims.

In point 8 of the Official Action, claims 29 - 36 are rejected under 35 U.S.C. 112, second paragraph, for being narrative in form and for being replete with indefinite and functional or operational language. In response, the Applicant has amended the aforementioned claims to include the structure that goes to make up the claimed device. In particular, independent claims 29 and 36 have been amended to include references to the bit rate estimation block and the database block. These amendments are believed to clarify the claims so as to overcome this ground of rejection.

Point 10 of the Official Action rejects claims 1, 6 - 9, 11, 14, 27 - 29, 31, 36 - 40, 42 - 43, 49, 51 - 52, 55, 69 - 70, 72, 74 and 85 - 88 under 35 U.S.C. 102 as being anticipated by Johansson (US Patent No. 6,473,399). In response, the Applicant has amended independent claims 1, 27, 29, 36, 49, 70, 85 and 88 in order to define the present invention more precisely and presents the following arguments in support of the amended claim set.

US Patent No. 6,473,399 (Johansson) relates to the provision of an automatic retransmit request (ARQ) procedure that optimally adapts to different communication conditions, and in particular, different channel transmission rates (see Johansson, column 2, lines 21 - 24).

Figure 1 of Johansson illustrates a communications system 10 including a first communications unit 12 and a second communications unit 14. Units of data (which may include substantive message information, control information, or both) are communicated from the first communications unit 12 to the second communications unit 14 over an appropriate communications medium. When the second communications unit 14 detects that one or more of the data units has either not been received or has been received erroneously, it transmits to the first communications unit 12 a request to retransmit those detected data units. (see Johansson, column 4, lines 27 - 39).

If the second communications unit 14 does not receive the requested data units by a certain point in time, it sends another request to retransmit those same data units.

According to Johansson, the aforementioned "certain point in time" is determined using a two-stage process. First, when the retransmit request is transmitted, the second communications unit 14 waits a predetermined time period corresponding to an expected round trip delay for the first communications unit 12 to receive and process the retransmit request and for the second communications unit 14 to receive the first retransmitted data unit. Second, after that predetermined time period, the second communications unit 14 counts up to (or down from) the number of PDUs which should thereafter be received. If the requested data units are not all received when the counter reaches that number, another request to retransmit those data units is sent (see Johansson, column 4, lines 40 - 55).

Johansson further discloses that in a particular embodiment of the invention, implemented in the context of the universal mobile telecommunications system (UMTS), "transmission rate information bits may be transmitted in parallel with the data PDUs from the MAC layer" and are used by the RLC controller to determine a transmission rate for a current physical layer (L1) time period (see Johansson, column 7, lines 46 – 52). Determination of the transmission rate enables the RLC controller to estimate how many PDU's should have been sent during the current L1 time period (Johansson, column 7, lines 52 - 54) thereby enabling the number of received PDU's to accurately counted.

It is emphasized that although Johansson refers to the use of "transmission rate information bits" in order to determine a "transmission rate for the current L1 time period", the transmission information bits being "transmitted in parallel with the data PDU's from the MAC layer", the patent provides absolutely no information concerning the nature of the transmission information bits, or the nature of the determination performed by the RLC. This is not surprising since Johansson's patent is concerned with an ARQ mechanism and not with the details of bit rate determination. More specifically, Johansson does not indicate whether the transmission rate information bits represent a direct indication of a pre-calculated transmission rate value that is simply transmitted from the MAC layer, or whether the RLC must operate on the transmission rate information bits, e.g. perform a calculation, in order to determine the transmission rate for the current L1 time period.

In contrast, the present application, as defined by the newly amended claims, concerns a mechanism for bit rate determination that makes use of particular transport format parameters in order to make a determination of a bit rate value representative of a bit rate in a logical channel by means of a specific calculation performed using the transport format parameters. It also relates to maintaining and updating indications of the determined bit rate value in a memory / database. In view of the lack of detailed information in Johansson regarding the nature of the transmission information bits and

the determination performed by the RLC, and remembering that for anticipation of a claim under 35 U.S.C. 102 it is necessary for every element of that claim to be disclosed in the claimed combination within a single publication, it is the Applicant's view that Johansson provides no direct teaching or suggestion that would lead a skilled person to anticipate the present claimed invention. The Applicant therefore considers the newly amended claims to distinguish over the teachings of Johansson so as to be patentable over Johansson and accordingly, favorable reconsideration of this application is respectfully requested.

New claims 90-91 are presented for further definition of the invention. The new claims are believed to be patentably distinguishable over the teachings of the art cited by the examiner in the Office Action.

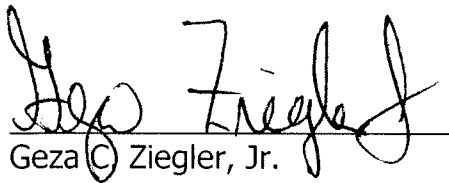
For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

10/036,215

Response to the office action mailed 6 March 2007

The Commissioner is hereby authorized to charge payment for the three month extension of time (\$1,020) as well as any other fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

  
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Reg. No. 44,004

6 September 2007  
Date

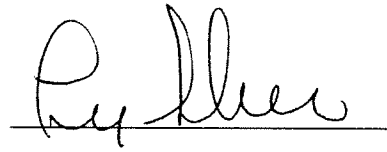
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